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THE EQUALIZING IMPACT OF STATE AID TO EDUCATION.

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THE STATE AID TO EDUCATION PROGRAMS IN KENTUCKY, MISSOURI, AND TENNESSEE ARE INVESTIGATED WITH RESPECT TO THEIR COMPENSATION FOR DIFFERENCES IN THE ABILITY OF LOCAL SCHOOL DISTRICTS TO SUPPORT EDUCATION. A HYPOTHETICAL AID FORMULA WAS USED AS A STANDARD AGAINST WHICH TO MEASURE THE PRESENT EQUALIZATION SCHEMA IN EACH OF THE THREE STATES. KENTUCKY WAS FOUND TO DO A BETTER JOB OF DISTRIBUTING FUNDS TO EQUALIZE FOR DIFFERENCES IN ABILITY TO PAY THAN WERE MISSOURI OR TENNESSEE. THE BASIC REASONS FOR THE DIFFERENCES IN THE THREE PROGRAMS LIE IN THE PROPORTION OF THE EDUCATIONAL PROGRAM WHICH MUST BE FINANCED LOCALLY AND THE SHARE OF STATE AID WHICH MUST BE DISTRIBUTED WITHOUT REGARD TO ECONOMIC ABILITY. STATE AID WAS FOUND TO DISCRIMINATE AGAINST URBAN AREAS IN ALL THREE STATES. THIS WAS EXPECTED BECAUSE OF THE GREATER RELUCTANCE OF RURAL AREAS EXPERIENCING OUTMIGRATION TO FINANCE THE EDUCATION OF STUDENTS WHO WILL NOT CONTRIBUTE TO THE COMMUNITY. (HW)

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# THE EQUALIZING IMPACT OF STATE AID TO EDUCATION

by

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## AUTHOR'S PREFACE

This study which was financed in large part by the Central Midwestern Regional Educational Laboratory, Incorporated, is part of a continuing project for the study of the way in which intergovernmental grants are distributed.

Subsequent reports will deal with Federal Aid to disadvantaged children and the need for reorganization of school systems in metropolitan areas.

David Barkin

# I. INTRODUCTION

An important function of state aid to education is the provision of resources to those school districts unable to raise local funds because of inadequate taxable bases. In the present study state aid programs in Kentucky, Missouri and Tennessee are compared to determine how well they compensate for differences in the ability of local school districts to pay for education.

This focus on equalization is important because of the firmly entrenched tradition of local support for education in most states. If the state provided educational services the resources of the entire state would be pooled and distributed throughout the state in accordance with need. Since this is not the case, the state can, at best, mitigate the injurious effects of wide disparities in local resources available per child among school districts.

The basis for evaluating the equalization effects of the programs under scrutiny in this paper is the degree to which state aid is concentrated in those school districts which have the least ability to support education. The most efficient system, from this point of view, would be one which provided no assistance to the very wealthy communities in favor of directing the limited funds that are available to those less able to finance an adequate educational program.

In the next section the three school aid programs are briefly described and compared with a hypothetical one explicitly designed to provide adequate equalization. A brief digression to contrast the effect of the aid programs on rural and urban communities highlights another aspect of these grants-in-aid.

## II. THE EQUALIZATION EFFECTS OF THREE AID PROGRAMS

### A. The Legislative Foundations

In all three states a minimum educational (foundation) program is described in dollar amounts in the legislation. In Kentucky and Tennessee specific guidelines for the costing of this program, including current instructional and administrative costs, capital equipment, and transportation, are provided and state aid is distributed on the basis of these calculations and the ability of the school system to pay for such a program. Missouri provides the bulk of its aid through a flat grant which is supplemented with payments based on the preparation of teachers and the taxable base of the community. Chart I summarizes the basic differences in the major features of the three programs.

In none of the states do all of the school districts participate in the equalization part of the foundation program. In Missouri the equalization program is a supplement for those districts unable to raise the $130 per pupil from a $1.00 per $100 assessed valuation (and some other school district revenues).[1] In Kentucky[2]

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[1]Information on the foundation program in Missouri and much of the data used in this study were kindly provided by Judith Aronson who collected and analyzed the material in connection with her doctoral dissertation "An Analysis of the Educational Equalization Effects of the Missouri Foundation Program in Relation to Fiscal Ability of Districts, 1964-65" (Washington University, estimated date of completion 1967). Other information was collected from the Department of Education of Missouri.

[2]Kentucky, Educational Bulletin, XXX:5, (May 1962), (Kentucky Common School Laws 1962); XXXII:9, (Sept. 1964), (Supplement to the 1962 Edition of the Kentucky Common School Laws). The Division of Statistical Services of the Department of Education provided all the data on Kentucky used in this study.

CHART I

## Basic Equalizing Features of State Aid Programs

| | | Kentucky | Missouri | Tennessee |
|---|---|---|---|---|
| 1. | Foundation Program | Equalizing grant based on assessed valuation & program cost. | Equalizing grant based on assessed valuation & fixed upper limit. | Equalizing grant based on index of economic ability & program cost. |
| | a) Teaching expenses | Part of foundation program. | Flat grant teacher preparation allowance. | Part of foundation program. |
| | b) Current operating expenses | " | Not specified. | " |
| | c) Transportation | " | Flat grant per pupil mile. | Flat grant per pupil mile with additional funds based on population density. |
| | d) Capital costs | " | Not covered. | Separate amount based on number of students & assessed valuation. |
| | e) Other features | Growth factor<br>Loss factor | | |
| 2. | Minimum guaranteed amount | Flat grant in lieu of foundation program. | Flat grant for all districts in addition to foundation program. | Flat grant in lieu of foundation program. |

and Tennessee[3] the equalization provisions provide a floor under which state aid cannot fall -- however, school districts can opt for an alternative method of distribution based on flat grants per pupil in average daily attendance (ADA). Tennessee's flat grant is based on the number of students, teaching positions, salary changes, and transport costs; guarantee clauses also provide more money in many districts. In Kentucky each district is guaranteed a minimum of $136 per pupil in ADA while in Missouri all districts receive $108 per pupil in ADA in grades one to twelve in addition to any funds that they may qualify for under the equalization formula.[4]

B. The Hypotheses

An examination of the legal basis for aid to education indicates that Tennessee should have the most equalizing aid formula. Aid is distributed inversely to the ability of the local school districts to pay for education and the total amount of support required from each school district is limited by the legislature.[5] In Kentucky aid is distributed inversely to property assessments but

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[3]Tennessee, State Department of Education, 1965 Public School Laws of Tennessee, compiled from Public Acts of 1965, (Nashville, 1965). The Division of Educational Research and Statistics of the State Department of Education provided almost all of the data on educational finance in Tennessee used in this study. Data on property assessments were obtained from Tennessee Taxpayers Association, 1965 Annual Survey of County, City, and Town Government in Tennessee, (Nashville, 1966).

[4]In all states districts are penalized for not complying with minimum local support standards.

[5]Tennessee does not use actual property assessments as the basis on which to distribute aid although this is the base from which school districts obtain the local contribution to the school budget. In the following analysis all calculations for the state of Tennessee are based on the ability of the system to equalize for differences in the "ability to pay" as defined by weighted index of sales tax revenues, motor vehicle registration receipts, non-governmental employment, and farm products sold. The conclusions would not be changed if property assessments were used in place of the index of economic ability but such a substitution would require additional considerations which will be discussed in future reports on this research.

no upper limit is placed on local contributions; in its stead a minimum tax rate is required of all school districts and this feature should have the effect of reducing the equalizing impact of aid to education somewhat. The Missouri program might be expected to be the least equalizing since most of the funds provided by the state are distributed on a flat grant basis to all school districts regardless of their ability to pay for education.

C. An Alternative Distribution Formula

The present state aid formulae were compared with one designed specifically to achieve perfect equalization of differences in ability to pay for education. Under the hypothetical formulation[6], the level of expenditure per pupil (the foundation level) was set at the average level for the state as a whole while the total amount of state aid available for education was left unchanged. A required tax rate was established so that the state aid fund would be exhausted at the point where the tax rate would be sufficient to produce sufficient revenues from local sources to meet the average cost of education per child in the state. Graphically this can be represented as follows:

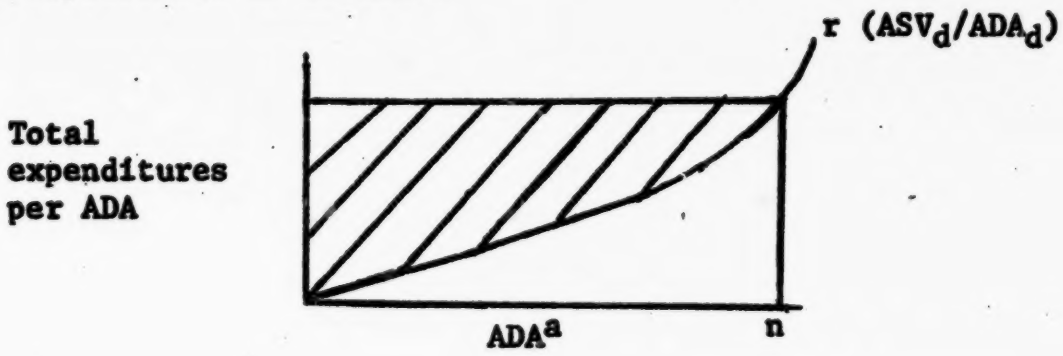


FIGURE I

a) Arranged cumulatively in school districts ranked from low assessed valuation to high.

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[6]This plan is based on one introduced by George Strayer and Robert Haig in The Financing of Education in the State of New York, (New York: The Macmillan Company, 1923).

The required tax rate (r) is sufficient to provide the average expenditures per pupil (x) in the school district in which no state aid is received (n). The shaded area represents the amount of state aid distributed to local school districts, while the area under the curve is the revenue which is raised locally.

If such a plan were to be used in a state aid program the result would be that each and every school district would be guaranteed a fixed amount per pupil for education and all districts would have the option of spending more than this minimum; all expenditures above this level would, however, be financed locally. Some districts might find themselves receiving no state aid under this program -- the number of districts in this category would depend on the established level of expenditures per child and the total amount of state aid available.

In spite of the fact that this scheme, which is so blatantly equalizing, would be politically unacceptable in most states in its present form, it was examined because this type of program requires the least expenditure of funds for the purpose of equalization. Clearly, it provides no incentive effect for expenditures above the mandated minimum, but this might be better handled through other mechanisms than an equalizing grant.[7] Such a program, if adopted, would clearly announce that the purpose of state aid to education is to compensate for differences in the ability of school districts to pay for education and to maintain a fixed minimum level of expenditure per child.[8]

The equalizing effect of the actual program and the hypothetical one were compared in two ways. (1) The difference in state aid distributed under the

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[7]Adjustments to the present formula might easily be made to incorporate other features, including incentive programs, specifically adopted to the needs of a particular state.

[8]The fixed level of expenditure per child might actually include allowance for the extra costs involved in educating secondary school students and providing special assistance for "educationally disadvantaged" children through a weighting system. Other measures of ability could readily be incorporated in this system.

present plan in excess of that required under the model just presented is an indication of the "efficiency" of the present program in achieving the goal of equalization. (2) Simple regression analysis was used to fit a straight (least squares) line to the data so that the variations about the line were minimized. Equalized assessed valuation (economic ability in Tennessee) at full market value was used as the independent variable to explain differences in state aid, both reduced to per pupil terms. A steeper slope (a higher negative regression coefficient) would indicate greater equalizing effects because this indicates that the poor districts receive relatively more aid than the affluent ones.

D. The Actual Situation[9]

The first comparison showed that both Kentucky and Tennessee distribute relatively small proportions (under six percent) of their total aid funds to districts which would receive less aid or even no aid under the proposed scheme (Table 1).

TABLE 1

Equalizing State Aid to Education Program

| | Kentucky | Missouri | Tennessee |
|---|---|---|---|
| Average expenditure (foundation level) | $331.50 | $521.50 | $284.50 |
| Required tax rate[a] | .55 | 1.19 | .72 |
| Total number of school districts | 200 | 502 | 147 |
| Number of districts not receiving any aid | 3 | 88 | 0 |
| "Efficiency" of actual state aid program[b] | .95 | .72 | .94 |

[a] Per $100 equalized assessed valuation.

[b] One minus the ratio of "excess aid" to total state aid.

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[9] All computations for this paper were made on the computing facilities at Washington University through NSF grant G-2296.

Missouri, on the other hand, distributes more than one-quarter of its state aid to districts which would not be considered deserving under the hypothetical program. The required tax rate for local school expenditures in Missouri (119 mils) was more than double that needed in Kentucky (55 mils) because of the markedly smaller proportion of total school costs paid by the state in Missouri (31 percent), when contrasted with the other two states (60 percent).[10]

This analysis confirms the hypothesis that state aid in Missouri does not achieve as much equalization of economic ability as do the distribution systems in either Kentucky or Tennessee. It also demonstrates that it would be possible, with the same expenditure, to ensure that every school district in the state spent at least the "average" amount spent per pupil in ADA in the state; this would, of course, require some increase in local taxation efforts, especially in the districts which are making a very small fiscal effort at present.

The second comparison lends itself to an examination of several different aspects of the problem of equalization. The first of these, the degree to which state aid to education compensates for differences in the ability of school districts to pay for education, was formulated in the form of a linear equation:

$$SA_d = a - b\ (AV_d/\$100)$$

where: $SA_d$ = state aid to district d

$AV_d$ = equalized assessed valuation in district d[11]

a = a constant term

b = regression coefficient

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[10]These tax rates refer to the full market or equalized value of property in a district rather than the value actually on the tax rolls.

[11]Although assessed valuation is used in the equation, the actual figures used were equalized assessed valuation except in the case of Tennessee where the weighted value of equalized assessed valuation was determined by use of the index of economic ability.

TABLE 2[12]

State Aid to Education

| | Kentucky | | Missouri | | Tennessee | |
|---|---|---|---|---|---|---|
| Value of | actual | hypo-thetical | actual | hypo-thetical | actual | hypo-thetical |
| a | $261 | $312 | $226 | $447 | $228 | $285 |
| b | -.24 | -.46 | -.16 | -.87 | -.33 | -1.00 |
| actual b / hypothetical b | .52 | | .18 | | .33 | |

From Table 2 we can see that Missouri's present program has a regression (b) coefficient only one-half as large as that of Tennessee, which has the most progressive expenditure program of the three under study. A local school district in Tennessee would lose about 33 cents in state aid for every $100 increase in ability to pay as measured by the index of economic ability. In Kentucky a $100 increase in equalized assessed valuation of any school district would occasion a 24 cent fall in state aid while in Missouri the same change in equalized assessed valuation would result in a one-third smaller fall in state revenue, that is, 16 cents.

The hypothesis that the Missouri program is the least equalizing of the three finds even greater support from a comparison of the regression coefficient of the actual with the hypothetical data. Referring again to Table 2, the analysis indicated that only 18 percent of the full equalizing effect which might be achieved in Missouri is actually realized at present. The Kentucky program presently

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[12]The regression coefficients in this section are all significant at the 1 percent level.

accomplishes more than one-half (52 percent) of the potential equalization while the state aid program in Tennessee falls in between with one-third of the effect being realized at present.

This comparative analysis of relative equalization is more revealing than a direct comparison of equalizing effects because of the differences in the distribution of ability to pay for education in the three states. This is illustrated by the change in Tennessee's rank from the direct to the relative analyses. Although the direct equalizing effect of the Tennessee program is greater than that in either of the other states, the judgement based on the latter comparison shows that Kentucky does, in fact, do a better job in relative terms. This is because Tennessee has a more equal distribution of economic ability than Kentucky, and the possibilities for equalization in Tennessee are greater with a smaller budget than those in Kentucky or Missouri.

These results, however, are not the ones predicted on the basis of an examination of the design of the programs, and a further analysis of the data indicated that this was because the program in Tennessee had several important loopholes. It is probable that without certain "guarantee" clauses in the legislation the Tennessee program would be more effective than the other two state aid systems in equalizing for differences in ability to pay for education. The inclusion of these guarantee provisions tempered the potential equalizing effects so much that Tennessee had to yield first place to its northern neighbor in this regard.

The effect of greater equalizing effects is to provide more resources per student to the poorer districts, relative to their ability to pay for education, than to the richer districts. It is ironic that the local tax structure in each of the three states reinforces the differences observed with regard to the equalizing effects of state aid. School districts in Missouri raise progressively

more revenue per student as they move up the wealth scale than in either of the other states (Table 3). In Kentucky, where the effects of state aid are substantially more equalizing, the local revenue structure is also more equalizing with the result that the poorer communities have more resources available per child, relative to the richer communities, than in either of the other states under scrutiny. This analysis is based on a formula similar to the one for state aid:

$$LR_d = a + b\ (AV_d/\$100)$$

where: $LR_d$ = local revenue raised by school district d.

TABLE 3

Local Tax Revenue for Education

| | Kentucky | Missouri | Tennessee |
|---|---|---|---|
| Value of | | | |
| a | $0 | $68 | -$6 |
| b | +.52 | +.82 | +.63 |

In summary, state aid to education varies inversely with the measure of economic ability in all three states, but there are important differences in the degree to which the three state aid programs compensate for variations in assessed valuation. The Tennessee program is more equalizing than in either of the other states (i.e., its expenditures are more progressive) but Kentucky does more relative to the potential equalization which might be achieved. Because of the strong element of flat grants in the Missouri system it is very much less equalizing in the sense we are discussing. While the differences in the absolute amount of state aid per child in ADA do not vary greatly as among states, the total amount available

from state and local sources per pupil does vary because of differences in per pupil receipts from local tax sources. As a result, Missouri school districts spend, on the average, more than school districts in either Kentucky or Tennessee.

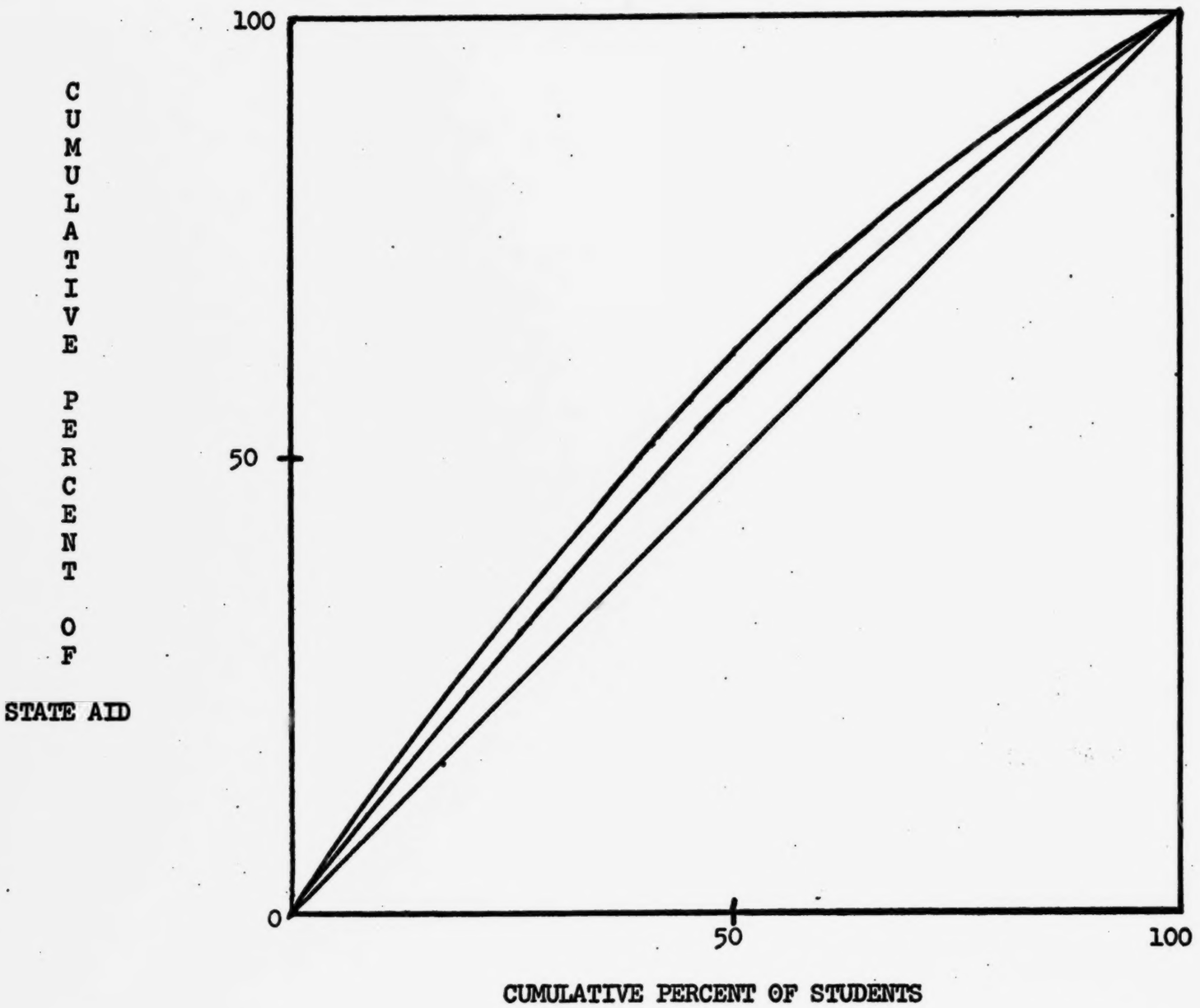
This assessment of state aid can be supported with graphical evidence which provides a convenient way of comparing the actual program with the hypothetical one within each state. One analysis is based on Lorenz curves which were originally developed to measure income inequality. On the abscissa (x-axis) the cumulative percent of students in the state is arrayed in ascending order of wealth while on the ordinate (y-axis) the cumulative amount of state aid distributed under each aid program is measured. For expenditures, the higher the curve and the more skewed it is toward the left, the greater the equalizing effects; conversely, the greater the convergence to the diagonal on the graph the greater proportionality of the expenditures.

In each of the graphs (1-3) the curve closest to the 45° line represents the distribution of state aid under the present program. Since they are all above the diagonal, they all have equalizing effects. These curves cannot, however, be compared directly because of the difference in the distribution of wealth (economic ability) in each of the states. A comparison can be made with another curve based on the same distribution of wealth but a different state aid program: the hypothetical one described above. The second curve, which is higher in the three cases under consideration in this study, reflects the data from the application of this program.

The two curves can be compared quantitatively by examining the area between the curve and the diagonal; the larger the area, the greater the equalizing effect. If the area under the first curve were compared to the area under the

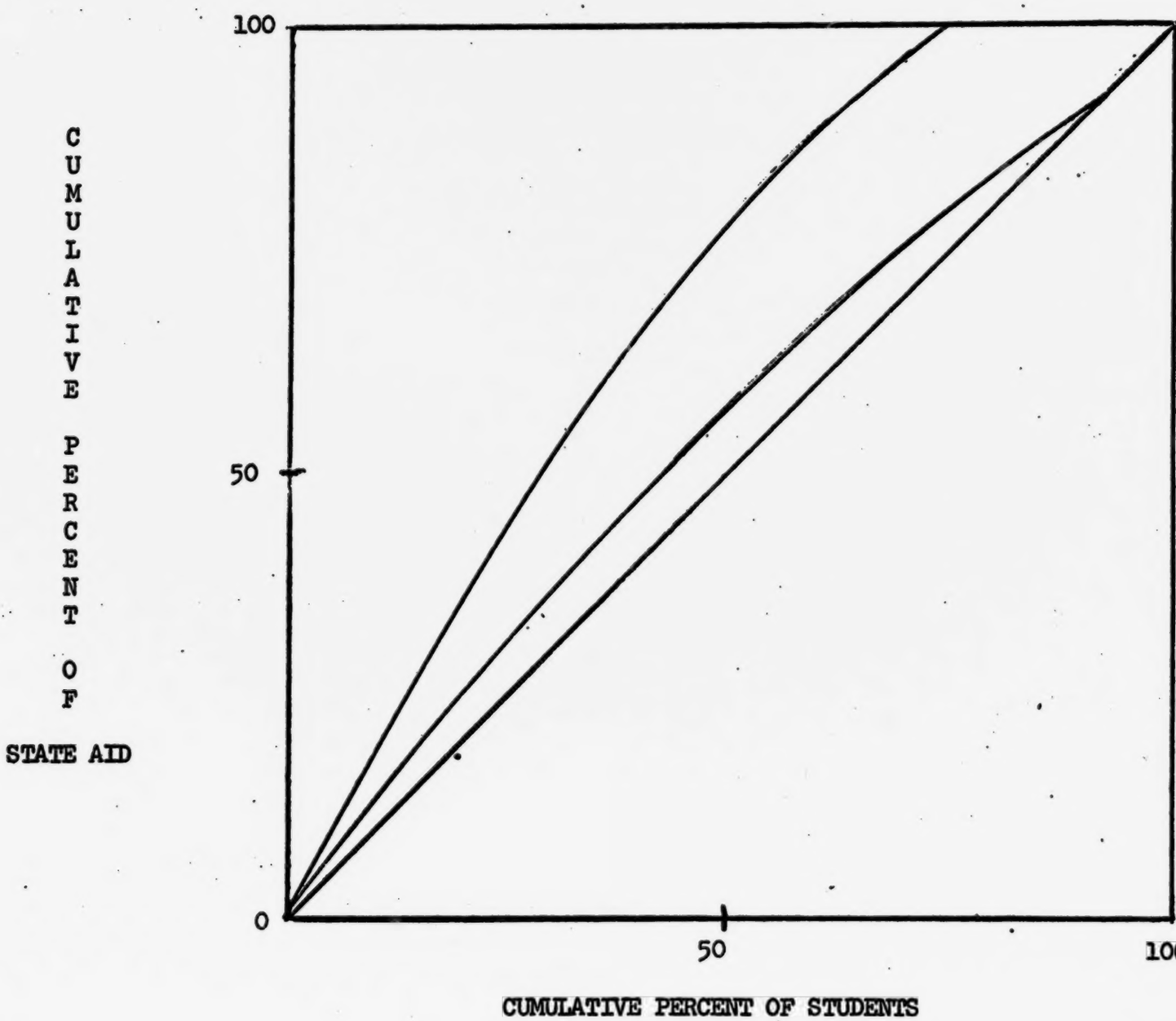
GRAPH 1

DISTRIBUTION OF STATE AID IN KENTUCKY



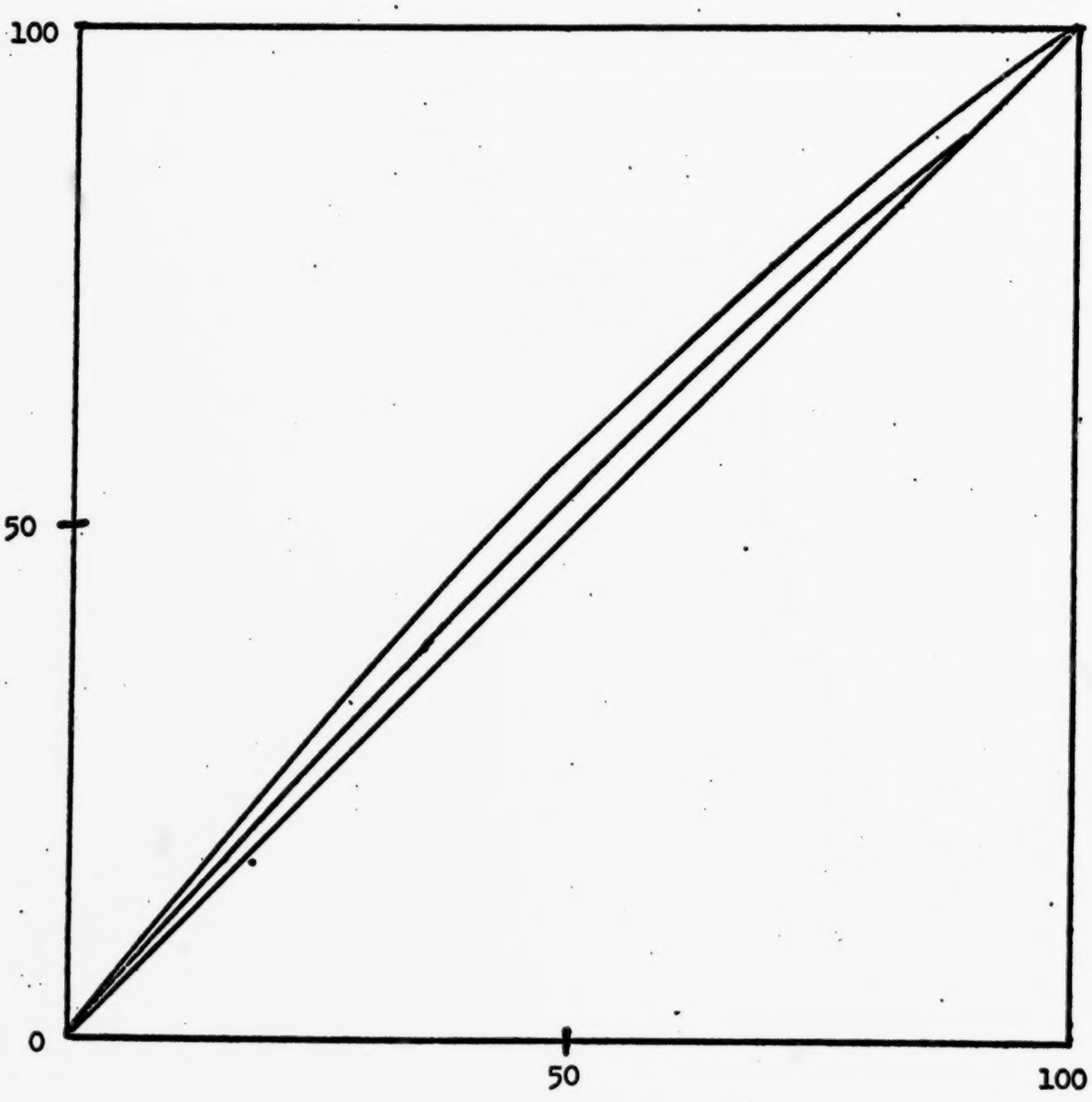
GRAPH 2

DISTRIBUTION OF STATE AID IN MISSOURI



GRAPH 3

DISTRIBUTION OF STATE AID IN TENNESSEE




CUMULATIVE PERCENT OF STATE AID

second we would have an index of the degree to which the actual program accomplished the tasks established for the hypothetical one.[13]

TABLE 4

Equalization Effects of State Aid Formulae*

| | Kentucky | Missouri | Tennessee |
|---|---|---|---|
| Actual | -.120 | -.097 | -.053 |
| Hypothetical | -.171 | -.461 | -.105 |
| Actual/Hypothetical | .71 | .21 | .50 |

*Measured by Gini Coefficients without correction for distribution of equalized assessed valuation.

This comparison confirms the superior ability of the present program in Kentucky to equalize for differences in ability to pay for education. The Missouri program is not even one-third as effective as the Kentucky one in achieving the goal of equalization. The Tennesseee program, based on the index of economic ability, achieves only about 70 percent of the equalizing effect that the Kentucky program does (Table 4).

E. The Effects of Urbanization on Equalization

Up to this point the discussion of equalization has focused on the distribution of funds to all school systems within each of the three states without any consideration of the way in which the pattern of state aid to education might discriminate in favor of one type of school system or another. In this section

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[13]A common measure of deviations from perfect equality is the Gini Coefficient. It is calculated by determining the area under the curve as a proportion of the area under the diagonal. A curve entirely above the line would have a negative coefficient. The measure used in Table 5 is a comparison of two Gini Coefficients.

some of the ways in which state aid discriminates in favor of or against urban areas are examined and the patterns of state aid in the three states under consideration are reexamined to determine their effects on the two types of areas.[14]

Perhaps one of the most persuasive reasons for a difference in the distribution of state aid stems from the effects of population mobility. There is a great deal of mobility in our society and much of it is from rural to urban environments.[15] Since many of the young people educated in rural school systems work and often live in urban areas after having finished a good part of their formal education, the benefits from this initial investment accrue to the urban areas.[16] In this situation there may be a necessity for some state aid to the areas experiencing emigration; the members of the communities who do not plan to leave may be reluctant to provide sufficient resources for a good education for people who will not stay and permit the community to benefit from its investment in education.[17] Inherent differences in the ability of rural and urban communities to pay for education should not be the justification for rural-urban differentials; they should be corrected by the equalization program.

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[14]Urban areas are defined, for purposes of this study, as the counties included in the Standard Metropolitan Statistical Areas (SMSA) defined by the Bureau of the Budget of the United States. All school districts in these counties are included in the urban parts of the states. Cf., U.S. Bureau of the Budget, Standard Metropolitan Statistical Areas. (Washington: Government Printing Office, 1964).

[15]The SMSA includes all communities commonly referred to as suburbs; no analysis was made of urban-suburban differences in state aid distribution patterns.

[16]This proposition was examined in some detail by Burton Weisbrod. He examined data from Clayton, a suburb of St. Louis, and found important effects arising from the mobility of the population. External Benefits of Public Education, (Princeton: Industrial Relations Section, 1964).

[17]One factor leading to a need for special treatment of urban areas is the higher cost of living and increased capital and current expenditures to educate children in urban areas.

The differences among the three states in aid on the basis of rural and urban school districts were examined in the same way as the state program for all school districts. The analysis showed that, without exception, smaller amounts of state aid were distributed with less equalization effect in urban areas than in rural parts of the states under all three programs. (See Table 5 which is similar to Table 2 and based on the same equation.)

TABLE 5

State Aid for Education to Rural and Urban Areas

| | Kentucky | | Missouri | | Tennessee | |
|---|---|---|---|---|---|---|
| Value of | Urban | Rural | Urban | Rural | Urban[18] | Rural |
| a | $188 | $271 | $195 | $232 | $198 | $226 |
| b | -.09 | -.27 | -.11 | -.17 | -.22 | -.31 |

The absolute advantage shifted to the urban areas when local revenues were examined. In most cases local taxation produced more money per child in urban than in rural areas. In both Kentucky and Tennessee most urban school systems receive more per pupil from taxes than do the rural school districts in spite of the greater progressivity of rural tax systems. In Missouri the urban communities have more progressive tax structures than the rural school districts and as a result the urban areas also have more funds available per student from local sources than do the rural school systems. (See Table 6 which is similar to Table 3 and based on the same equation.)

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[18]The figures for urban areas in Tennessee are not statistically significant and are presented for comparative purposes only.

TABLE 6

Local Tax Receipts for Education in Rural and Urban Areas

| | Kentucky | | Missouri | | Tennessee | |
|---|---|---|---|---|---|---|
| Value of | Urban | Rural | Urban | Rural | Urban | Rural |
| a | $79 | -$4 | $60 | $90 | $114 | $9 |
| b | +.40 | +.52 | +1.07 | +.69 | +.28 | +.46 |

As a result of these factors, most urban communities in all three states have relatively more money from state and local sources per student in ADA than do the rural areas. The disadvantage resulting from state aid plans is more than compensated by differences in local revenue. In Kentucky the two types of school systems receive about the same absolute amount per child although the urban areas with larger property tax bases have more resources per pupil in ADA than do rural school districts with the same tax base. In Missouri the poor rural school districts have greater resources per pupil in ADA than urban ones but once the equalized assessed valuation per child exceeds $14,200 the urban areas are more likely to have more resources available than an equally affluent rural community; in well over half of the communities in the state of Missouri the urban areas fare better than do the rural ones. In Tennessee the urban communities start off with about one-third more funds per pupil than do rural districts and the absolute differences between similarly endowed communities continue to grow with their wealth.

## III. CONCLUSIONS

Throughout this discussion attention focused on the extent to which state aid to education compensates for differences in the ability of local school districts to support education. The wide range of ability of communities within a state to finance educational costs out of local tax receipts is directly linked to the problem of the level of expenditure for education because of the tradition of local autonomy in education.

It is often better to separate the problem of inequality of ability to pay taxes from that of inequality of expenditures because the two problems involve separate considerations in the design of taxation and expenditure programs. They were combined in this study because of the close connection between property tax revenue and local expenditures for education. With present institutional arrangements low levels of income and/or wealth are likely to lead to correspondingly low levels of expenditure on education.

Educators plead for increased state aid so that students from poor and rich communities alike will receive "equal educational opportunities." This study concentrated on the problem of inequality of ability to finance educational costs. Equalization was examined by determining the degree to which state aid to education programs channeled more funds to the poorer school districts. When this criterion is combined with another one which mandated an effective level of educational achievement, "equal educational opportunity," in the state (and translated into cost terms) we would be able to say even more; the alternative distributive formula described above did this.

We found that of the three state programs under scrutiny Kentucky does a better job of distributing funds to equalize for differences in ability to pay than does either Tennessee or Missouri. The basic reasons for the differences

in the three programs lie in the proportion of the educational program which must be financed locally and the share of state aid distributed without regard to economic ability. Although Tennessee specifically limits the amount of local expenditures required under its foundation program and might be expected to have the most equalizing program, guarantee clauses limit the effectiveness of the program's impact on equalization. Kentucky, on the other hand, sets the minimum required tax rate on assessed valuation which must be applied but grants few exemptions from the program. Like Kentucky, Missouri's program establishes a minimum effective tax rate but it distributes the bulk of its aid under a system of flat grants which are only slightly equalizing.

State aid discriminates against urban areas in all three states. This is, in part, to be expected because of the greater reluctance of areas experiencing outmigration to finance the education of students who will not contribute to the community. The urban areas were able to compensate for the lack of state aid by raising funds from local tax sources to finance their educational programs. As a result, the urban school systems had more money available per student than equally wealthy rural communities.

An alternative aid formula was used as a standard against which to measure the present equalization schema. It is evident that the ability of state aid to education to equalize for differences in local school districts' economic capacity to support education is not at an optimum presently. The equalizing impact of such a grant-in-aid program could be greatly increased, especially in a state like Missouri where there are large differences in economic ability among districts.

The alternative program presents a hypothetical solution to the problem of equalization which might be considered in state aid programs. It is the simplest

formulation of a program which has many variations; it would, for example, be possible to take into consideration the additional costs of urban and/or secondary education; required effective tax levies might be flexible and vary inversely with the ability of the school district to support education; and provision might be made for flat grants and aid for specific programs in addition to or as part of the basic equalization programs. The formula described in the second part of this paper cannot be applied directly; this was done purposefully because there is a danger that if application of such a program were done without consideration of specific problems in each state the program might have serious side-effects on other aspects of education.